Department
for Education

DfE Statistics

Developing DfE Statistics in 2018

February 2018

Contents

Foreword

The Department for Education is one of the largest producers of official statistics in government. We publish over 50 distinct statistics series each year – comprising around 80 individual publications – covering a wide breadth of policy areas, from GCSE results, to the social work workforce; from spending on the education system, to the destinations of leavers from higher education.

The expertise and effort that goes in to producing these statistics is remarkable. Skilled teams pull in data from local authorities, schools, further education providers, other government departments and other organisations. These data undergo extensive processing, merging, and cleaning before being interpreted to produce statistics that tell the story about what is happening across the education system. These statistics are a public asset: they inform debate, monitor progress and provide transparency over the education system.

Over the years, the portfolio of statistics produced by DfE has increased as new policies have emerged and as user expectations for accessible data and statistics increases. This organic growth means that our ever-growing library of statistics is not always easy to navigate. We know there is duplication across different publications. There are cases where the same information is available via different routes – or where we publish multiple versions of the same statistics, which are badged as "preliminary", "interim", "revised" and "final". In some cases, there are good reasons for that – but in other cases, less so.

The way people consume data and statistics is changing. At some point in time a report supported by some pre-populated tables was at the forefront of statistical dissemination. But that is no longer the case. We need to modernise our statistics, ensuring they meet the wide and growing user needs of the new decade – ensuring that we tell clear stories for a wider audience, while also allowing the expert to drill-down into the underlying data to do their own analysis, maintaining individuals' confidentiality as we do so. This sort of development takes time and effort to get right. And we need to create the space to do this development.

This document sets out our plans for how we will improve the coherence of DfE statistics and take forward the modernisation of our approach to making data and statistics available to users. There are some areas where we are suggesting reducing the frequency of our existing publications, or stopping them all together. But this is not about making less data available – it is about making more data available in ways which best meet the needs of our wide range of users. In some cases, publications might be combined; in others we might be suggesting changing the format or timing of the release. And of course, we will be maintaining the

[professional standards we work to](#), and ensuring that any changes we make will be compliant with the [Code of Practice for Statistics](#).

If you have any comments of concerns about anything set out in this document please contact the head of profession for statistics at hop.statistics@education.gov.uk

Neil McIvor, Chief Data Officer and Chief Statistician, Department for Education

1. Background & the Case for Change

The Department for Education publishes a huge range of official statistics and other data. These publications have grown organically over time: in part in response to policy change and in part due to increasing expectations of transparency around public sector organisations. While school performance tables (started in 1992) are one of the most widely-used statistics published by the department, there is now a far wider range of information available about not only the schools system, but also further education, higher education, early years, and children's services provision. That information, however, is not always presented in the most coherent way and is at times not as accessible as it might be.

Following the 2010 election there was a cross-government effort to share more data as part of the transparency agenda. This manifested itself in a number of ways – significant volumes of information on public spending began to be released. It also led to a rapid expansion of the statistical information published by the department. For example, school performance tables were expanded to include information on the school workforce and spending by schools – rather than focussing solely on attainment in schools. We began to publish 'underlying data' to many of our statistical publications, often taking the form of information about individual schools, enabling users to drill down into the information to levels not previously possible.

New statistical publications came into being as part of the transparency agenda such as the list of schools published each month. While this expansion of available data is valuable to expert users the sheer volume of data and overlaps between publications can be confusing.

So while it has been undoubtedly positive that the department has expanded the range of information and statistics it publishes, it is right to now focus on making these data and statistics more accessible and clear.

The department's statistics are not always easy to find through our website; there are elements of duplication, there are some statistics which may no longer be relevant in their current format, and our dissemination approach is no longer market-leading. Fundamentally, if official statistics are to be of real public value, they need to be:

- easy to find; and
- easy to use.

This document sets out our plans for how we will develop our statistics over the next year – to ensure we are using our resources to best effect and are meeting the needs of users, finding ways to draw out links between our data and help users

navigate the department's statistics to uncover the stories the data tells. This document covers the high-level principles we are proposing to use as the basis for our decision-making; it sets out some possible approaches; and in a few specific areas, set outs specific illustrative proposals for change.

2. Principles for Publishing DfE Statistics

In thinking about how to develop the department's statistics we have established some key principles which will govern how, and what, we publish. These are not meant to be strict rules about what is or isn't published, or the format in which users access the department's data, but rather is a guide we will look to when making decisions about how data and statistics are published:

- **We will provide headline messages for all our statistics:** despite increasing demand for micro-level data for data-linking projects, and tools to allow expert users to drill down into datasets, there remains a need for clear, accessible high-level summaries of the headline messages from a set of statistics.

- **We will work to make our data accessible**, while protecting confidentiality. The underlying data that feed into statistics should be accessible to users at the lowest level of granularity (and to open data standards in a machine-readable format) possible which still allows us to protect the confidentiality of the data subjects. This allows users to produce their own breakdowns and analysis and means that ready- made tables should be provided only when there is a clear user need, and should be kept to a minimum.

- **Our statistics will be published annually by default**, and only more frequently where either the data is volatile enough to warrant it or where there is a new policy initiative where understanding small movements in number is particularly important.

- **We will take a *layered* approach to dissemination**, recognising that for any set of statistics there could be a range of [user personas](#) accessing the data. This means providing simple headline messages, written for everyone, not just the experts, supported by the necessary pre-populated tables, supported by tools that allow expert users to explore the data in more detail.

- **We will consider multiple possible dissemination routes.** Not all departmental numerical information needs to be published as formal 'official statistics' – although we need to be clear about the quality standards all releases meet. While regular numerical information will come under the broad banner of official statistics, there is merit, for example, in publishing some simple "count" information from operational systems, and publishing this in a simple format without the fuller commentary and methodology documentation of a formal official statistics publication.

- **Financial statistics showing trends should be presented in real terms where a suitable methodology for doing so can be identified**. This should not preclude the inclusion of cash-terms data in any statistics publications.

- **The department's statistics website should be structured in such a way that makes it easy for users to navigate** statistics – and to navigate them through different "lenses" – whether that be by phase of education, or by for example, workforce or financial information.

3. A More Coherent Approach to DfE's Statistics Website

The DfE statistics website currently groups statistics into a number of "collections". These "collections" each correspond to a set of statistics. The full list is:

- [14 to 19 diploma](#)
- [16 to 19 attainment](#)
- [Adult further education outcome-based success measures](#)
- [Admission appeals](#)
- [Childcare and early years](#)
- [Child death reviews](#)
- [Children's social care workforce](#)
- [Children in need](#)
- [Destinations](#)
- [Early years foundation stage profile](#)
- [Education and training](#)
- [Exclusions](#)
- [Fostering](#)
- [Further education: advance learner loans](#)
- [Further education and skills: learner participation and qualifications collection](#)
- [GCSEs (key stage 4)](#)
- [Graduate labour market](#)
- [Higher education graduate employment and earnings](#)
- [Key stage 1](#)
- [Key stage 2](#)
- [Key stage 3](#)
- [Local authority/school finance data](#)
- [Looked-after children](#)
- [National achievement rates tables](#)
- [NEET](#)
- [Neighbourhood (absence and attainment)](#)
- [Outcome-based success measures (further education)](#)
- [Participation rates in higher education](#)
- [Performance tables](#)
- [Pupil absence](#)
- [Pupil projections](#)
- [School and pupil numbers](#)
- [School applications](#)
- [School capacity](#)
- [School workforce](#)
- [Secure children's homes](#)

- [Special educational needs (SEN)](#)
- [Teacher training](#)
- [Widening participation in higher education](#)
- [Youth cohort study](#)

This approach means that users need to understand what precise element of the education system they need information on before being able to access what they need. Instead, users should be able to drill down to find the data they are interested in, see that data in the wider context and be able to make links with other similar data. Our current approach to publishing and categorising published statistics inhibits this with each publication acting as an individual set of data and most categories of publications containing just one publication per year.

To address this, we propose to overhaul the categories of publication creating a small number of groups of publications – but no existing published data would be lost. Our producers of statistics will be expected to identify links between publications (usually within the same category) to help users understand the wider context of each publication. The list below is not exhaustive but is intended to give a flavour of how we might look to group our statistics.

Theme	Statistics
Characteristics and participation	Schools pupils and their characteristics
	National pupil projections
	Admission appeals in England
	Destinations of KS4 and KS5 pupils
	Education and training statistics for the UK
	Permanent and fixed-period exclusions in England
	Participation in education, training and employment
	Pupil absence in schools in England
	Secondary and primary school applications and offers
	School capacity
	Special educational need in England
	Participation rates in higher education
	Widening participation in higher education

Theme	Statistics
Attainment	Early years foundation stage profile results
	Phonics screening and key stage 1 assessments
	National curriculum assessments: Key Stage 2
	Revised GCSE and equivalent results in England
	A level and other 16 to 18 results
	Performance tables
	Graduate outcomes
	Adult further education outcomes
	National achievement rates
	Qualification achievement rates
	Outcome based success measures
Funding & finance	LA and school expenditure
	Income and expenditure in Academies in England
	Planned LA and school expenditure
	Advance learner loans
	Student loan repayment model
	SLC statistics
Workforce	Children's social care workforce
	Schools workforce in England
	Initial teacher training profiles
Children's social care	Childcare and early years provider survey
	Child death reviews
	Characteristics of children in need
	Children looked after in England including adoption
	Children accommodated in secure children's homes

Theme	Statistics
Outcomes	Graduate outcomes

Adult further education outcomes

Outcome based success measures

Graduate Labour Market Outcomes |

4. Linking to Supporting Data

We think it is important that users can also link to other relevant published data that may be of interest. We should be make it easier for users to find other similar information – either not currently published as official statistics, or published by other organisations. These could include:

Category	Link to Data
Pupils and participation	ONS population estimates data ONS NEETs data Monthly Academy summariser Monthly published 'get information about schools' extract Get information about schools website Gov.uk information on choosing a school place for your child Research on rates of claim for FSM
Attainment	OFSTED data
Funding & finance	Funding allocations Academy brokerage costs
Workforce	Teacher supply model STRB data
Children's social care	Ofsted publications on children's social care
FE	Institute for Apprenticeship data
HE	HESA outputs UCAS statistics SLC statistics and data

Further, we need to consider how statistics produced by the department sit alongside statistics produced by other related organisations and the devolved administrations – such as OFSTED, the Higher Education Statistics Agency, and the Student Loans Company. We will work with these organisations as we develop our plans to consider what further information we might provide through DfE's statistics website to help users understand the education statistics landscape.

5. Modernising Our Approach to Dissemination

Currently, like many producers of official statistics, we release information predominantly via a static portable document formats (pdf), supported by Excel and .csv tables.

We have recently begun to publish some data in a more interactive and visual way (such as FE statistics and the financial benchmarking tool), and we envisage doing more of this in the future.

We know that our different sets of users want to access information in a variety of ways. We therefore plan to move to a more "layered" approach to disseminating our statistics, with information published in different ways to meet a variety of needs and expertise. This layering could include:

- A concise static document with clear headline trends and conclusions from the statistics, supported by:

    - A small number of stand-alone Excel or .csv tables – only where there is a clear demand and obvious high-profile breakdowns – such as gender, region and age.

    - A visualisation-based summary of the headlines – possibly interactive.

- A point-and click dissemination tool to allow users to produce bespoke drill-downs of the aggregate data (while protecting confidentiality). At its simplest, this would be a pivot table, but we are exploring more sophisticated ways of providing this functionality.

- Downloadable csv "underlying" data – providing direct access to appropriately aggregated underlying data, providing this at the lowest practicable level of granularity without prejudicing confidentiality or our rounding and suppression policy.

- Access to record-level data via a micro data lab for accredited researchers (see next section).

As we develop this approach we will consider examples of good practice, such as DWP's National Insurance Allocation Statistics and ONS's work on user personas.

6. Data Access

While the approach outlined in section 5 will meet the needs of a large proportion of our users we know that some expert users require access to the underlying record-level data in order to conduct more detailed research. The department has a well-establish data-sharing process for third parties carrying out legitimate research into the education system where those parties can demonstrate that:

i)   Their research potentially benefits children;
ii)   That they can comply with a strict set of standards to ensure data security and confidentiality is maintained;
iii)   Their use of the data is underpinned by appropriate legalities; and
iv)   The data being requested is proportionate to the request for usage.

The current process of evaluating and administering third-party data access requests places a significant administrative burden on the department, and is often unsatisfactory for those requesting data access as a result of the length of time it takes.

Therefore, as a further level in our "layered" approach to dissemination, we are looking at options for establishing new ways to allow accredited research to access record-level data more swiftly and in more modern ways, while ensuring all legislative and ethical data-sharing requirements are met. Further, in order to bring transparency to how we share data, on 14 December 2017 we published a list of current third-party data shares carried out by the department and we will follow this up by setting out more detail about our data sharing processes, and proving updates on our data shares via the DfE statistics homepage.

7. Possible Changes to Existing Publications

This document deliberately focuses on a set of principles (section 2) that we will adhere to while reviewing our existing publications over the coming year. There are, however, some specific changes to existing publications that we are already at the early stages of considering. This list is not exhaustive, nor are all the changes set out here certain – they are provided to give some more detail about how the principles set out in section 2 might be applied in practice. **Where we do decide to implement any of these changes we will provide users with an update in the relevant publications**. We will also look to provide a central list of changes we plan to make on our statistics home page.

Statistics:	**Absence Statistics**
Possible Change:	Move from termly to annual publication
Rationale:	Absence statistics are relatively stable across publications: it is long-term trends that might be of more interest. Links to principles of annual publication by default. This change would not preclude the possible publication of termly figures in simple table format, or the publication of term-by-term comparisons in a single publication. It brings these data into line with most of the publications, which are produced annually.

Statistics:	**Early Years, KS1 and KS2 Attainment**
Possible Change:	Merge or Otherwise Simplify
Rationale:	We currently publish data on early years', phonics & KS1 and KS2 as three separate publications, and there are three stages of the release of the KS2 data. We will consider options to simplify the statistics landscape, for the publications covering primary school measures. We will set out further detail on this as our thinking develops and as we get feedback from users.

Statistics:	**Further Education and Skills Statistics**
Possible Change:	Various changes
Rationale:	In December we published specific changes that we will be making to our FE statistics. These changes are driven by the increasing focus on apprenticeships and looking at how we can rebalance our efforts to provide more detailed and timely information on that element on the FE system. You can read more about these changes here.

Statistics: **Forecast (education) Expenditure by LAs**

Possible Change: Stop publishing

Rationale: We publish, separately, forecast expenditure on children and education, and actual expenditure – at a local authority level. An initial analysis of this publication suggest that the forecast expenditure is less accurate that a simple roll-forward of the previous year's actual expenditure. We therefore question the value of the publication and think that resources would be better deployed on developing other statistics of more relevance. We will make analysis of the accuracy of these forecasts available before finalising a decision about stopping publication.

Statistics: **National Pupil Projections**

Possible Change: Move from annual to biennial

Rationale: The national pupil projections are based on ONS population projections. These are only updated biennially. Despite this the pupil projections are currently updated annually. In alternate years the only update to the series is the additional information from the school census being input into the model. Publishing this data biennially brings it into line with the ONS publication cycle and ensures the difference in data inputs between publications is the same between any two consecutive publications.

Statistics: **Attainment Statistics & Performance Tables**

Possible Change: Consider How to De-Duplicate

Rationale: Revised KS2, KS4, Post 16, MAT and destinations "SFR" publications are published at the same time on the same day as the school and college performance tables. They are also based on the same underlying data. Although they serve different purposes, we think there is scope to review whether we can meet the full breadth of users needs in a simpler way. We will set out further detail on this as our thinking develops and as we get feedback from our range of users. Changes to performance tables themselves are out of scope for these plans.

Statistics: **KS4 Destination Statistics and 16-18 Participation Statistics**

Possible Change: De-Duplicate

Rationale: The department separately publishes information on the participation of 16-18 year olds and the destination of pupils following completion of key stage 4. This is one example of increased data transparency causes overlaps in our data. Where pupils go after completing key stage 4 clearly overlaps with what children aged 16-18 are doing. We therefore recommend merging these two publications to show a single version of participation at ages 16-18 – linked to schools previously attended.

Statistics: **Widening Participation in Higher Education**

Possible Change: Simplify matching and outputs. Expand to include broader pupil characteristics

Rationale: Simplifying the matching and processing allows us to publish much earlier than in the past. The publication currently covers statistics by school type and free school meal eligibility but there is interest in wider measures of progression to Higher Education including by ethnic group and special educational need (SEN) status. Including broader pupil characteristics would also align more closely with other DfE publications. Simplifying the matching and tables will make the methodology more transparent and reduce QA requirements

8. Performance Tables, ASP, and Attainment Statistics

School performance tables and the Analyse School Performance service are out of scope for this work. We will, however, be reviewing the associated attainment statistics publications and considering how they sit against the principles set out in section 2.

9. Statistical Policies

In addition to complying with the Code of Practice for Statistics, DfE has a range of statistical policies that provide more detail on how we compile and present our statistics. As we develop statistics as set out in this document we will be ensuring these policies are applied consistently across our statistics. These are kept under review and any material changes are noted on our statistics home page.

10. Questions about these Plans

If you have any comments or concerns about anything set out in this document please contact the head of profession for statistics at hop.statistics@education.gov.uk

About this publication:

enquiries   www.education.gov.uk/contactus
download   www.gov.uk/government/consultations

Reference: DFE-00048-2018

Follow us on Twitter:
@educationgovuk

Like us on Facebook:
facebook.com/educationgovuk